# THE PLOUGH BOY.

## AND JOURNAL OF THE BOARD OF AGRICULTURE.

BY SOLOMON SOUTHWICK.

"He that observeth the wind shall not sow; and he that regardeth the clouds shall not reap."—BUT—"He that tilleth his land shall have plenty of bread."—*Ecclesiastes.*

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## ORIGINAL.

### THE BRIEF REMARKER.

The Regents of the University of this state, have passed a resolution for purchasing two hundred copies of THE BRIEF REMARKER, to be distributed among our common schools. This work, our readers are already apprised, is from the pen of the Rev. EZRA SAMPSON, of Hudson. It unites sound sense with sound morality; nor is it wanting, though written avowedly for common readers, in those graces of style which render a book agreeable to the taste of the classic and refined. We have no hesitation in saying, that the Board of Regents have evinced a due regard for the advancement of literature in our common schools, in the distribution of this work among them. The venerable author, we believe, may enjoy the consoling reflection—a reflection which cannot but lighten the infirmities of age, and gild the verge of the grave with a tranquil beam—that many virtuous and aspiring youth, who imbibe the morality of *The Brief Remarker*, will rise up and bless his memory, for leading them into the pleasant and peaceful paths of wisdom and of truth.

In making these remarks, we beg leave to assure the reader, that we shall never stoop to praise any work, without a just regard to its merits; that the work in question is without blemish, we do not pretend to say, but leave to professed critics and reviewers to particularise its blemishes, as well as its beauties. But we fear not to predict, that when the American *literati* and the lovers of *belle lettres*, of future times shall enquire after the ADDISONS, the JOHNSONS, and the GOLDSMITHS of our country, those LAY PREACHERS, whose works so eminently blend amusement with instruction, THE BRIEF REMARKER will be called up to take its stand among them. The hand of youth and beauty will then turn over its leaves in search of wisdom and delight; nor will the sage, or philosopher, deem it a useless companion, in the hour of solitude, and closet meditation.

We extract the following article, as a specimen of the author's style.

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THE BRIEF REMARKER.—NO. XVII.

*Truths said of boys, which boys will ne'er believe.*

Our life is beset with perils at every step, but no period of it is perhaps quite so perilous as that in which the boy is stepping into manhood. Then it is that his feeling is fervid, his hope vivid, and his self-confidence at the highest. Then it is that he listens with most rapture to the voice of the siren, that his heart is most susceptible to the allurements of pleasure; and it is then that he spurns alike the trammels of restraint, and the counsels of friendship.

Untaught by experience, he despises the experience of others; wise in his own conceit, he scorns the monitions of age and riper judgment; full of himself, he feels no need of direction or advisement, and regards it as an insult to his understanding. He feels a sentiment of indignation and disdain toward those who should presume to teach *him* how to behave. His sense is deceived, "his soul is in a dream, he is fully confident that he sees things clearly, and yet he sees them in a false mirror, exactly such as they are not."

Nor is it always the youths of the least promise that are in the most danger. So far otherwise, those of forward parts, of lively imaginations, and of strong passions withal, are in peculiar hazard during those green years in which is the critical period of transition from the condition of boys to that of men. The very qualities that distinguish them and set them above their fellows, diminish the likelihood of their establishing a sober steadiness of character, and ofttimes are the means of launching them into the whirlpool of dissipation, where all is lost; where reputation, morals, and whatever is estimable in human beings, are all engulphed together.

How many instances do the perilous times we live in furnish—how many deplorable instances of hopeful boys abandoned and lost ere they were out of their *teens!* And by how much the more their parents had doted upon them, by so much the more are their hearts wrung with anguish.

Far less is the danger, for the most part, while the immature youth remains under the parental roof, or in "the well-ordered home." There he finds it not so easy to shake off salutary restraints; there he needs must feel some respect for the opinion of the society in whose bosom he was born and educated, some deference of parental authority, and some regard to the feelings of near kindred. But when he leaves the haven of home, and is pushed off into the stream of life, it is more than an even chance that he will founder in the stream, if he have not previously been under the governance of moral and religious principle. In his new situation, it often happens that he finds new enticements to lead him astray, and at the same time feels himself loosened from the authority and influence which had heretofore repressed his wayward propensities; and if vicious, but genteel and artful, companions, get the first hold on him, his ruin is in all probability sealed.

It was in clear view of these affecting circumstances that the celestial poet, Cowper, penned the following lines:

——"My boy, the unwelcome hour is come,
When thou, transplanted from thy genial home,
Must find a colder soil and bleaker air,
And trust for safety to a stranger's care."

It is hard to mourn over the *death*, but it is sometimes still harder to mourn over the *life*, of a beloved child. When they see the one whom they had expected would be found the solace of their age, the honor of their family, and an ornament to society—when they see *him*, at the instant of their highest hopes, turn to the ways of folly; no heart but the heart thus exercised, can conceive the sharpness of the pang. This is sorrow indeed; and the best that parents can do to prevent it, or rather all they can do, is to lay themselves out in good earnest to train up their children in the way they should go.

Good education is the thing in the world the most important and desirable, but it is of wider scope than most people imagine. What is called learning is only a part of it, and so far from being the most essential part, it is but the *husk*. In vain will you employ your endeavours to educate

your children, unless you give seed to the heart, as well as culture to the understanding ; unless you make their moral frame the subject of your assiduous and well-directed care ; unless you take at least as much pains to make them be well principled and of virtuous manners, as to make them shine in learning and accomplishments: for intellectual improvement, if their morals be neglected, will tend to render them wise only to do evil. If you train up your boy to a strict regard to truth, honesty, and integrity, and to a deep reverence of all that is sacred : if you train him up in habits of industry, temperance, and love of order—it is then, and only then, you can reasonably expect that he will pass through the perilous crisis before him uncontaminated, and that his manhood will be crowned with honour.

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FOR THE PLOUGH BOY.

Mr. SOUTHWICK,

Having noticed a communication in the last Plough Boy, describing a disease of the feet, which has lately appeared among the horses in the neighbourhood of the writer, I am, with him, induced to ascribe it to the same probable cause that has occasioned the loss of hundreds of neat cattle in the county of Herkimer. The disorder there has been called the *Hoof ail*. The first indication of it is the frozen state of the feet.—When it first appeared there the cause assigned for it was the severity of the weather, added to the probable cause that the diseased cattle, in going to drink, had wet their feet in the water. Experience, however, soon exploded this opinion, and it also assisted in suggesting a more probable cause, to wit, a previous diseased state of the feet, which rendered them more liable to the effects of severe cold. It is some years since I first heard the suggestion that the smut, or ergot, with which the smooth-stalked meadow grass (*Poa pratensis*) of that county is often much infected, was the probable cause of the disease. Whether the idea was first entertained there by any one unlearned, or whether it had its origin from some scientific source, I have never understood ; but the probability of this being the real cause of the disease in question seems to be toun led on the following facts, which have come under my observation. 1. Cattle were never affected with the Hoof ail on the newly cleared farms of that county, the first grass cultivated on such being for the most part cats-tail, or timothy, (*Phleum pratense.*) 2. Where by severe pasturing, or otherwise. the timothy gave way to the introduction of the meadow grass, which is very natural to the richer lands of that county, the *Hoof ail* then became more or less prevalent. 3. In some parts of that county the soil is of a sandy texture, not natural to this grass, and in such districts I have never heard of the existence of this disorder. 4. I have seen the same disorder among cattle kept on a farm in Orange county, the meadows of which abounded with this grass.

The feet of all sorts of Cattle, while in a healthy state, are so constituted as to be enabled to withstand the external frosts. While the oleaginous matter of their bodies becomes hard when cooled, that of the feet remains of a mere thin oily texture. If the smut of this grass has the same deleterious effect on beasts that ergot sometimes has on men, it would seem that the limbs must be the parts first and most affected. In some districts of France the poor peasantry have sometimes suffered severely by eating rye diseased with the spur or ergot ; their limbs becoming attacked with a dry gangrene so that they fall off without any pain. Duhamel says "the Hotel Dieu at Orleans had many of these miserable objects who had not any thing more remaining than the bare trunk of the body, and yet lived in that condition several days."

Where the *Hoof ail* has prevailed, farmers would do well to eradicate the growth of this grass from their mowing lands, by tilling them, and then stocking them down with grasses of more valuable kinds. In pasture lands this grass may be suffered to remain, as in pasturing it can do no injury, though it is not the most valuable for any purpose. If, on excluding this grass from mowing lands, the farmer finds his cattle and horses freed from the *Hoof ail*, he may then rest satisfied that the cause of the disorder has been ascertained. A FARMER.

NOTE.—From the "account of the result of experiments on the produce and nutritive qualities of different grasses, and other plants used as the food of animals," by the Duke of Bedford, the following observations are made :

"The proportional value in which the grass of the latter-math exceeds that of the flowering crop, is as 6 to 7. The grass of the seed crop and that of the latter-math are of equal value.

"This grass is therefore of least value at the time the seed is ripe : a loss of more than one fourth of the value of the whole crop is sustained if it is not cut till that period : the straws are then dry, and the root leaves in a sickly decaying state ; those of the latter-math, on the contrary, are luxuriant and healthy. This species sends forth flower-stalks but once in a season, and these being the most valuable part of the plant for the purpose of hay ; it will from this circumstance, and the superior value of the grass of the latter-math, compared to that of the seed crop, appear well adapted for permanent pasture."

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## On making Sugar.

FOR THE PLOUGH BOY.

Having observed in the *Plough Boy*, of last week, an answer to the enquiry of a correspondent in regard to the means of extracting sugar and molasses from grain, together with the method mentioned by Sir H. Davy, for converting the starch of grain into sugar, I have thought proper to add some further observations on the subject.

To extract the starch from grain, and then convert that into sugar, is obviously too expensive to ensure any profit from the process. For extracting the saccharine matter of grain, and converting it into sugar, or molasses, I perceive that two patents have been obtained ; the latter during the last year. I am ignorant of the process on which the patentees found their claims ; certainly not on any discovery of theirs, that sugar may be obtained from a great variety of grains, as well as roots, &c. but probably on what may be thought the cheapest method of obtaining the sugar from grain of different sorts.

It is first to be understood, that grain of every sort, while in the milky state, contains more or less saccharine matter ; that when the grain hardens, by ripening, this matter loses its sweetness, and forms farina, or starch ; but that this may again be changed into saccharine matter by the process of malting the grain ; hence it would seem, that all that is necessary for making sugar or molasses, out of grain must be something like the following process. In the first place, malt your grain. To perform this to the greatest advantage, be careful not to let the grain proceed too far in the process of germination ; but as soon as this has fully commenced, or when you perceive the young sprouts bursting open the skins of the grains, let the process be stopped, by kiln drying the grain. The reason for this precaution in the management seems to be this : as soon as germination has fully commenced, the young germ is nourished by the matter in the grain which has again become saccharine ; and the longer the germ is nourished on this, the less will be left remaining.

After the grain has been kiln dried, it is to be ground to that degree of fineness that is best calculated for extracting all the saccharine matter, by pouring water on the mass. The degree of heat the water should have for this purpose, I do not pretend to determine ; but this may be easily ascertained by experiment. As soon as the water has imbibed the saccharine matter from the ground grain, it should be drawn off as closely as possible ; then cleansed, by running through a leach of sand, or other material adopted for the purpose, and then boiled down to sugar, or molasses, as may be required. In making sugar, the granulation of the mass may readily be effected, by stirring it while cooling. If it be afterwards found requisite to let the sugar drain, the drainings will, of course, be good molasses.

But I am induced to believe, that sugar and molasses may be made, to much greater advantage, from the juice of the sweeter sorts of the pumpkin. From an account I have lately seen of a product of the large sort of this plant, which was at the rate of about 25 tons to the acre, I am of opinion that, with proper cultivation, as much as 15 tons to the acre may usually be had of the common yellow kind ; and these, on account of their greater sweetness, ought probably to be preferred for the purpose. A ton of pumpkins probably contains nearly as great a proportion o juice as a ton of apples ; of course about 4 barrels of the juice of the pumpkin may be extracted from every ton, or 15 hogsheads from the product of an acre. Can there be any doubt but that this quantity of juice, when boiled down, would afford one hogshead, or half a ton, of sugar ? This, at $12 per cwt. amounts to $120. I will put the expense of extracting this quantity of the juice and converting it into sugar, at $35 ; the cultivation of the crop, gathering it, and the rent of the land, at $25 more ; and there then remains $60 as the *clear profit* of an acre. It should also be remembered, that after the extraction of the juice, the remainder of the mass would be found but little diminished in value, in proportion to its remaining weight, for feeding and fatting cattle ; so that at least $10 more may, on this account, be added to the clear profit just mentioned.

For extracting the juice two methods may be mentioned. In either way, the seeds are to be taken out, the pumpkins cut into pieces, and then either ground in a common cider mill, or softened in the steam boiler ; after which, the mass is to be laid up in a cheese in the cider press, and the juice pressed out, pursuing a process similar to that for making cider. As fast as the juice is

extracted it should be run through a leach, to clarify it, and then boiled down immediately, observing the method before mentioned for granulating the sugar. By the process of steam-boiling the pumpkins, the greatest quantity of juice would no doubt be afforded, though in this way the expense would be somewhat enhanced.

The clarified juice of the pumpkin may be very profitably converted into a pleasant spirituous liquor, in the manner mentioned in the *Plough Boy*, of the 5th inst. I have no doubt but that it may also be used as an essential ingredient in making a pleasant artificial wine.

From the seeds of the pumpkin it is well known that an oil, as valuable as that of the olive, may be extracted; a circumstance that is calculated to confer additional importance to the too much neglected culture of this valuable plant. The pumpkin crop is also finely calculated to precede that of winter wheat; for if the former be as early cultivated as the spring frosts will admit, the crop may be gathered sufficiently early for preparing the ground for sowing the latter crop in due season. Gypsum has a very powerful effect on the growth of the pumpkin, so that with this manure alone good crops of this plant may be raised.

A PLOUGH BOY.

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FOR THE PLOUGH BOY.

Mr. EDITOR,

It was gratifying to a reflecting mind to read the controversy which appeared in the *Plough Boy*, between the CURATE and Mr. GENET, on the subject of light, heat, and lightening. Their ingenious display induced a wish that they, or some other person capable, would prescribe the preventives against the bad effects of the latter.—Much property, last summer, was consumed by the electric fluid, and what the next season may bring forth is uncertain. Precautionary measures are admitted by the God of nature; therefore information, through the *Plough Boy*, relative to the best mode of preparing, erecting and fixing the points of a lightening rod; what extent of space will its influence occupy; whether rust destroys its influence; and whether it would be proper to erect two on lengthy buildings? An answer to all or part of this request, will be acknowledged by thousands of Farmers.

Observing in the *Plough Boy* a description of animals and vegetables, exhibited at different agricultural shows, has induced me to give the following statement: Last autumn I called on Judge Gardiner, of Newburgh, Orange county, for an assortment of the best plants and roots, intended to be planted in the spring, for seed. He took off of a heap, containing two or three waggon loads of beets, or in the common style scarcity, or in the more refined style mangle wurtzel, one of the roots. On returning home it was weighed in my presence, and found to be without the top 17 lb. 2 oz. and measured 27 inches round. The use of this root for either man or beast is worthy of cultivation.

A FARMER.

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We feel ourselves obliged by the writer of the preceding remarks, who has thereby revived in our recollection, an article on the subject of LIGHTNING, which we have long had upon our files, and which we now present to our readers. It is copied from the *Franklin Gazette*, of Philadelphia; and from the signature, we are inclined to attribute it to the pen of the venerable Judge PETERS, a gentleman whose numerous and able communications to the Agricultural Society of Philadelphia, have no doubt, contributed greatly to improve the Agriculture of Pennsylvania.

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## On Lightning.

*To the Editors of the Franklin Gazette.*

GENTLEMEN:—Scarce can one now unfold a newspaper, without seeing an account of some dreadful, and often fatal accident from Lightning. Barns, recently filled with hay or grain, are, it may be observed, much more frequently struck with lightning than dwelling houses; or oxen in teams, than the carriages to which they are attached; and *kitchen chimneys*, with fire on the hearth, than other chimneys of the same buildings.

The reason of the above is not unobvious.—1. Lightning, (the electric fluid) in its passage between a thunder cloud and the earth, will always take that direction where it will meet with the least resistance; or, in other words, where it will meet with the best conductors. Now, next to metallic substances, which, with charcoal and black lead, may be termed perfect conductors of electricity, are reckoned animal bodies, and water in its liquid state, which are less perfect conductors; then, steam vapour, smoke and heated air, which are ranked among *imperfect* conductors; while dry air, vitreous and resinous substances, and all animal excrescences, as silk, hair, wool, feathers and horns, are considered as *non-conductors*. 2. When the electric fluid passes through a perfect conductor, little or no sensible effect is produced; thus, a stream of lightning may pass through a metallic conductor, without producing any very sensible increase of temperature. But, when it forces its passage through a non-conductor, or an imperfect one, an explosion takes place, (thunder) the medium will be rent asunder, and, if inflammable, will frequently be set on fire.

On the above principles which are now well established, we may I believe, satisfactorily account for all the phenomena which usually occur in thunder storms.

1. In a barn recently filled with fresh vegetable substances, a slight degree of fermentation will usually, perhaps always take place; this may be perceived by the increase of temperature, which may be sensibly felt by thrusting the hand and arm into the mow. In consequence of this fermentation, a column of vapour will ascend into air above the barn, favorable to the passage of the electric fluid; but this vapour, as well as the contents of the barn, being imperfect conductors, the phenomena above mentioned will be liable to take place—an explosion and inflammation.

2. The reason why teams of horses or oxen are more liable to be struck with lightning than the carriages to which they are attached, may be that their bodies presenting a great mass of animal substance, in contact with the earth, aided by the vapour ascending by perspiration or respiration from their heated bodies, will favor the passage of the electric fluid; but, as in the case of the barn, being only imperfect conductors, the fatal accident may ensue; while the *tire* on the wheels of the carriage will generally defend it from a like accident.

3. The heated air, and aqueous smoky vapor in the funnel of a chimney having fire on the hearth, will, as it were, solicit the lightning to pass in that direction; but for the same reason as in the case of the barn, or team of animals, the like phenomena may take place.

But the mere *rationale* of the above effects of lightning, can of itself afford but little satisfaction to those who are exposed to the danger; the question of real interest is, how may these accidents be prevented?

Happily for mankind this question is now no longer of doubtful or difficult solution? Providence, through the agency of intelligent and reflecting men, (chiefly by Dr. Franklin) has revealed this preventative, which, from the experience of more than half a century has been found effectual; THE LIGHTNING ROD. And he who will neglect to make use of this valuable discovery, and gift of heaven, must certainly be chargeable with all the evils consequent on his neglect.

A few plain directions respecting the use of lightning rods, or metallic conductors, may not, perhaps, be deemed unseasonable at the present time.

1. The conductor may be made of pretty thick nail rods, lopped, or welded together; or, which is better, a piece of thick wire. Let the top of the rod be formed into a moderate sharp point, and *tinned*, to prevent it from rust or oxidation. Or, where tinning may not be convenient, let the top of the rod be well rubbed over with black lead, which will answer nearly the same purpose.

2. Where a choice can be made, let the rod be attached to the kitchen chimney, especially when this is on the western side of the building; as thunder storms most frequently come from that quarter. Let the upper extremity of the rod extend a few feet, (say 4 or five) above the chimney, and the lower extremity descend 5 feet, at least, into the ground, surrounded by a bushel or two of charcoal, which, being itself a good conductor of electricity, as well as absorbent of moisture, will greatly facilitate the passage of the electric fluid between the rod and the earth A considerable depth may be obtained, with little trouble, by letting the rod pass through the wall of the building into the cellar, and there sinking it into the ground.

Similar directions may be observed in attaching a lightning rod to a barn, or other building.

3. Horses, or oxen in a team, may, with a little previous preparation, be preserved from a stroke of lightning thus: Let a piece of pointed wire, say about a foot long, be inserted in a hole, made for the purpose, in the top of the hames or yoke, when a thunder storm is apprehended, and on this wire let there be suspended a small metallic chain, so that its lower extremity may hang down, and drag along on the ground. An explosion will thus be generally prevented, or at least rendered harmless.

In a similar manner, a person either riding on horseback, or walking on the ground, during a thunder storm, may be preserved from injury.

*Philadelphia, Aug. 13, 1819.* R. P.

# SELECTIONS.

## Agricultural Chemistry,

*No. XXVII.*

BY HUMPHREY DAVY.

### OF HEAT IN SOILS.

Many soils are popularly distinguished as *cold;* and the distinction, though at first view it may appear to be founded on prejudice, is really just.

Some soils are much more heated by the rays of the sun, all other circumstances being equal, than others; and soils brought to the same degree of heat cool in different times, *i. e.* some cool much faster than others.

This property has been very little attended to in a philosophical point of view; yet it is of the highest importance in agriculture. In general, soils that consist principally of a stiff white clay are difficultly heated; and being usually very moist they retain their heat only for a short time. *Chalks* are similar in one respect, that they are difficultly heated; but being drier they retain their heat longer, less being consumed in causing the evaporation of their moisture.

A black soil, containing much soft vegetable matter, is most heated by the sun and air; and the colored soils, and the soils containing much carbonaceous matter, or ferruginous matter, exposed under equal circumstances to the sun, acquire a much higher temperature than pale-coloured soils.

[159] When soils are perfectly dry, those that most readily become heated by the solar rays likewise cool most rapidly; but I have ascertained by experiment, that the darkest colored dry soil (that which contains abundance of animal or vegetable matter; substances which most facilitate the diminution of temperature,) when heated to the same degree, provided it be within the common limits of the effect of solar heat, will cool more slowly than a wet pale soil, entirely composed of earthy matter.

I found that a rich black mould, which contained nearly 1-4 of vegetable matter, had its temperature increased in an hour from 65 deg. to 88 deg. by exposure to the sunshine; whilst a chalk soil was heated only to 69 deg. under the same circumstances. But the mould removed into the shade, where the temperature was 62 deg. lost in half an hour, 15 deg. whereas the chalk, under the same circumstances, had lost only 4 deg.

A brown fertile soil, and a cold barren clay were each artificially heated to 83 deg. having been previously dried: they were then exposed to a temperature of 57 deg. in half an hour the dark soil was found to have lost 9 deg. of heat; the clay had lost only 6 deg. An equal portion of the clay containing moisture, after being heated to 83 deg. was exposed in a temperature of 55 deg. in less than a quarter of an hour it was found to have gained the temperature of the room. The soils in all of these experiments were placed in small tin plate trays, two inches square, and half an inch in depth; and the temperature ascertained by a delicate thermometer.

[160] Nothing can be more evident than that the genial heat of the soil, particularly in spring, must be of the highest importance to the rising plant. And when the leaves are fully developed, the ground is shaded; and any injurious influence, which in the summer might be expected from too great a heat, entirely prevented; so that the temperature of the surface, when bare and exposed to the rays of the sun, affords at least one indication of the degrees of its fertility; and the thermometer may be sometimes a useful instrument to the purchaser or improver of lands.

### OF MOISTURE IN SOILS.

The moisture in the soil influences its temperature; and the manner in which it is distributed through, or combined with, the earthy materials, is of great importance in relation to the nutriment of the plant. If water is too strongly attracted by the earths, it will not be absorbed by the roots of the plants; if it is in too great quantity, or too loosely united to them, it tends to injure or destroy the fibrous parts of the roots.

There are two states in which water seems to exist in the earths, and in animal and vegetable substances; in the first state it is united by chemical, in the other by cohesive attraction.

If pure solution of ammonia or potassa be poured into a solution of alum, alumina falls down combined with water: and the water dried by exposure to air will afford more than half its weight of water by distillation; in this instance the water is united by chemical attraction. The moisture which wood, or muscular fibre, or gum, that have been heated to 212 deg.

[161] afford by distillation at a red heat, is likewise water, the elements of which were united in the substance by chemical combination.

When pipe-clay dried at the temperature of the atmosphere is brought in contact with water, the fluid is rapidly absorbed; this is owing to cohesive attraction. Soils in general, vegetable, and animal substances, that have been dried at a heat below that of boiling water, increase in weight by exposure to air, owing to their absorbing water existing in the state of vapor in the air, in consequence of cohesive attraction.

The water *chemically combined* among the elements of soils, unless in the case of the decomposition of animal or vegetable substances, cannot be absorbed by the roots of plants; but that *adhering* to the parts of the soil is in constant use in vegetation. Indeed there are few mixtures of the earths found in soils, that contain any chemically combined water; water is expelled from the earths by most substances that combine with them. Thus, if a combination of lime and water be exposed to carbonic acid, the carbonic acid takes the place of water; and compounds of alumina and silica, or other compounds of earths, do not chemically unite with water: and soils, as it has been stated, are formed either by earthy carbonates, or compounds of the pure earths and metallic oxides.

When saline substances exist in soils, they may be united to water both chemically and mechanically; but they are always in too small a quantity to influence materially the relations of the soil to water.

[162] The power of the soil to absorb water by cohesive attraction, depends in a great measure upon the state of division of its parts: the more divided they are, the greater is their absorbent power. The different constituent parts of soils likewise appear to act, even by cohesive attraction, with different degrees of energy. Thus vegetable substances seem to be more absorbent than animal substances; animal substances more so than compounds of alumina and silica; and compounds of alumina and silica, more absorbent than carbonates of lime and magnesia: these differences may however possibly depend upon the differences in their state of division, and upon the surface exposed.

The power of soils to absorb water from air, is much connected with fertility. When this power is great, the plant is supplied with moisture in dry seasons; and the effect of evaporation in the day is counteracted by the absorption of aqueous vapour from the atmosphere, by the interior parts of the soil during the day, and by both the exterior and interior during night.

The stiff clays approaching to pipe-clays in their nature, which take up the greatest quantity of water when it is poured upon them in a fluid form, are not the soils which absorb most moisture from the atmosphere in dry weather. They cake, and present only a small surface to the air; and the vegetation on them is generally burnt up almost as readily as on sands.

The soils that are most efficient in supplying the plant with water by atmospheric absorption, are those in which there is a

[163] due mixture of sand, finely divided clay, and carbonate of lime, with some animal or vegetable matter; and which are so loose and light as to be freely permeable to the atmosphere. With respect to this quality, carbonate of lime and animal and vegetable matter are of great use in soils; they give absorbent power to the soil without giving it likewise tenacity: sand, which also destroys tenacity, on the contrary, gives little absorbent power.

I have compared the absorbent powers of many soils with respect to atmospheric moisture, and I have always found it greatest in the most fertile soils: so that it affords one method of judging of the productiveness of land.

1000 parts of a celebrated soil from Ormiston, in East Lothian, which contained more than half its weight of finely divided matter, of which 11 parts were carbonate of lime, and 9 parts vegetable matter, when dried at 212 deg. gained in an hour by exposure to air saturated with moisture, at temperature 62 deg. 18 grains.

1000 parts of a very fertile soil from the banks of the river Parret, in Somersetshire, under the same circumstances, gained 16 grains.

1000 parts of a soil from Mersea, in Essex, worth 45 shillings an acre, gained 13 grains.

1000 grains of a fine sand from Essex, worth 28 shillings an acre, gained 11 grains.

1000 of a coarse sand worth 15 shillings an acre gained only 3 grains.

1000 of the soil of Bagshot-heath gained only 3 grains.

[164] Water, and the decomposing animal and vegetable matter existing in the soil, constitute the true nourishment of plants; and as the earthy parts of the soil are useful in retaining water, so as to supply it in the proper proportions to the roots of the vegetables, so they are likewise efficacious in producing the proper distribution of the animal or vegetable matter; when equally mixed with it they prevent it from decomposing too rapidly; and by their means the soluble parts are supplied in proper proportions.

### VARIOUS REMARKS ON SOILS.

Besides this agency, which may be considered as mechanical, there is another agency between soils and organizable matters, which may be regarded as chemical in its nature. The earths, and even the earthy carbonates, have a certain degree of chemical attraction for many of the principles of vegetable and animal substances. This is easily exemplified in the instance of alumina and oil; if an acid solution of alumina be mixed with a solution of soap, which consists of oily matter and potassa; the oil and the alumina will unite and form a white powder, which will sink to the bottom of the fluid.

The extract from decomposing vegetable matter when boiled with pipe clay or chalk, forms a combination by which the vegetable matter is rendered more difficult of decomposition and of solution. Pure silica and siliceous sands have little action of this kind; and the soils which contain the most alumina and carbonate of lime, are those which act with the greatest chemical energy in preserving manures. Such soils merit the appellation which is commonly given to them, of rich soils; for the

[165] vegetable nourishment is long preserved in them, unless taken up by the organs of plants. Siliceous sands, on the contrary, deserve the term hungry, which is commonly applied to them, for the vegetable and animal matters they contain not being attracted by the earthy constituent parts of the soil, are more liable to be decomposed by the action of the atmosphere, or carried off from them by water.

In most of the black and brown rich vegetable moulds, the earths seem to be in combination with a peculiar extractive matter, afforded during the decomposition of vegetables: this is slowly taken up, or attracted from the earths by water, and appears to constitute a prime cause of the fertility of the soil.

The standard of fertility of soils for different plants must vary with the climate; and must be particularly influenced by the quantity of rain.

The power of soils to absorb moisture ought to be much greater in warm or dry countries, than in cold and moist ones; and the quantity of clay, or vegetable or animal matter they contain greater. Soils also on declivities ought to be more absorbent than in plains or in the bottom of vallies. Their productiveness likewise is influenced by the nature of the subsoil or the stratum on which they rest.

When soils are immediately situated upon a bed of rock or stone, they are much sooner rendered dry by evaporation, than where the subsoil is of clay or marle; and a prime cause of the great fertility of the land in the moist climate of Ireland, is the proximity of the rocky strata to the soil.

[166] A clayey subsoil will sometimes be of material advantage to a sandy soil; and in this case it will retain moisture in such a manner as to be capable of supplying that lost by the earth above, in consequence of evaporation, or the consumption of it by plants.

A sandy, or gravelly subsoil, often corrects the imperfections of too great a degree of absorbent power in the true soil.

In calcareous countries, where the surface is a species of marle, the soil is often found only a few inches above the limestone; and its fertility is not impaired by the proximity of the rock; though in a less absorbent soil, this situation would occasion barrenness; and the sandstone and limestone hills in Derbyshire and North Wales may be easily distinguished at a distance in summer by the different tints of the vegetation.—The grass on the sandstone hills usually appears brown and burnt up; that on the limestone hills, flourishing and green.

In devoting different parts of an estate to the necessary crops, it is perfectly evident from what has been said, that no general principle can be laid down, except when all the circumstances of the nature, composition, and situation of the soil and subsoil are known.

The methods of cultivation likewise must be different for different soils. The same practice which will be excellent in one case may be destructive in another.

Deep ploughing may be a very profitable practice in a rich thick soil; and in a fertile shallow soil, situated upon cold clay or sandy subsoil, it may be extremely prejudicial.

[167] In a moist climate where the quantity of rain that falls annually equals from 40 to 60 inches, as in Lancashire, Cornwall, and some parts of Ireland, a siliceous sandy soil is much more productive than in dry districts; and in such situations, wheat and beans will require a less coherent and absorbent soil than in drier situations; and plants having bulbous roots, will flourish in a soil containing as much as 14 parts out of 15 of sand.

Even the exhausting powers of crops will be influenced by like circumstances. In cases where plants cannot absorb sufficient moisture, they must take up more manure. And in Ireland, Cornwall, and the western Highlands of Scotland, corn will exhaust less than in dry inland situations. Oats, particularly in dry climates, are impoverishing in a much higher degree than in moist ones.

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FROM THE AMERICAN FARMER.

CEDAR PARK, Nov. 8th, 1819.

MR. SKINNER,

DEAR SIR—I did not receive until the 6th inst. your favor of the 29th October, requesting some seed of the large Pumpkins, grown this year on my Farm at Westbury, the account of which was published in the 25th No. of the American Farmer—24 of them were sent as then proposed, to the Baltimore market, but the purchasers being disappointed in seed, which proved deficient in quantity and quality, (whether from drought or some intrinsic defect, I am unable to determine, as I never cultivated them before,) I forwarded a parcel of seed to Mr. Thomas Norris, of Baltimore, to be distributed among them. I now send you a proportion of what I reserved. A gentleman, who

I believe introduced them here from Boston, tells me, that they are more properly termed the *Persian Squash.* They produce but few to the vine, but planted close, say 4 1-4 feet distant in a rich soil, I am persuaded that in a favourable season, they will nearly cover the ground with fruit. I tried this year at the Farm on which I reside, a few rows in a cut of 24 acres of corn, the rest of which was planted in common Pumpkins, two seed in every second hill, at 4 1-2 feet, say in squares of nine feet. The corn was planted about the 15th of April, the Pumpkins about the 15th of May—the large Pumpkins appeared to yield as well as the common, and those gathered weighed from 30 a 100 wt. each ; whilst the common were from 10 a 50 wt.!—the 24 acres produced an incredible quantity, many thousands —they have been used by my people at will. for themselves and their hogs, and from 2 to 3 ox cart loads a day have been distributed to cattle, hogs, and those horses that would eat them, (which all thrive rapidly,) and collected in heaps, and covered with corn stalks, they will last, I expect, till the new year. The large Pumpkin proves less palatable than the common, and is more susceptible of injury from frost, and indeed has no advantage but its superior size, and ripening earlier. The Pumpkins had no other cultivation than what was necessarily given to the corn, and being planted a month later, the vines were not in the way of the last ploughing. I do not think that I made an ear of crop less for the additional crop of Pumpkins, which when the corn was stripped, appeared, at a distance, almost to cover the ground.—I tried the Baltimore market, with about one thousand very fine, but the price and demand were too limited to make it an object.; but at $5 per hundred, they would have yielded more than $100 per acre. On a rich part of the cornfield at Westbury in addition to Pumpkins, I scattered about the 10th of July, Ruta Baga seed—The season proved very fatal to that crop, and as it was sown too thick, and never thinned, the roots were generally small ; but the experiment convinced me that the three crops may be raised together with advantage on the same ground ; the product of corn from the whole cut exceeded eight barrels to the acre ;—the Pumpkins very fine, the Ruta Baga, indifferent.

The American Farmer, edited by you, pleases me more in its plan and execution, than any agriaultural publication I have seen. It promises to collect, preserve and diffuse useful information : to bring into general notice and use the best agricultural implements and machinery ; and to introduce valuable seeds and plants not hitherto cultivated among us, and the best kinds of those that have been. That I am not myself a subscriber, is, because my son, who lives with me, is ; but I file your papers and must apply for numbers 19, 21 and 22, which from some casualty never came to hand, and I would suggest the utility of a periodical Index. That I am not a contributor, is, because my experiments and observations have not been digested or preserved with sufficient accuracy ; and indeed from long desuetude I have lost the habit of writing, and now shrink involuntarily from pen, ink and paper ;—but to prove my favorable disposition, I will add that in your last number, you have given a good plate of a very valuable Horse Rake, for gathering clover seed, which you suggest in a note, must prove defective from choaking.*—I have long used it.—The second crop of clover should be left to become perfectly ripe, when it will appear black and crumble to the touch ; the machine should be used when thd dew is off, say after 9 or 10 o'clock ; the driver should be furnished with a light hoe, which lies in the machine, and when the teeth begin to choak, he must clean them by drawing the seed and chaff into the body, and continue this till the body is full, when he empties it on the ground and continues his course, taking care always to make his deposits contiguous to each other, forming lines through the field ; along these the cart afterwards moves, when they are collected and trodden in ; but these masses must be opened before finally put away, or they will heat and the seed be destroyed.—These machines with a man and a horse will collect from 16 to 20 flour barrels *packed* full, in 6 or 7 hours, equal to 4 or 5 bushels of clean seed.—I also used hand-rakes, both iron and wooden, which suit farmers on a small scale still better. [*See cut.*]

The iron Rake No. 1, requires a strong man to carry it 6 or 7 hours. The wooden Rake No. 2, may be used by a child of 9 or 10 years. It is formed of three thin boards of oak or pine—the two side boards 18 to 20 inches long, 9 broad and 3-8ths thick—the bottom board a foot broad, armed with teeth 8 inches deep and 1-4th of an inch from each other, and pointed—the bottom board does not extend within 3 inches as far back as the side boards, and is bevelled off in the middle parts, to facilitate the falling off of the seed and chaff into the bag ; but this must at times be assisted by the hand—the bag of linen is attached to the back part of the machine, and goes over the top and bottom. A boy or girl of 10 or 12 years old, in 6 or 7 hours, will collect 4 flour barrels full, well packed, (equal to a bushel of cleaned seed) which should be placed conveniently in the field, and being of small bulk do not require further curing. These hand machines may be dragged over the cleanest parts of the clover, so as to avoid the seeds of weeds, which the horse rake collects indiscriminately.

I remain with esteem, &c.

JOHN F. MERCER.

* The article, and plate of the machine, here alluded to, we shall give in a future number of the *Plough Boy.*—EDITOR.


# THE PLOUGH BOY.

ALBANY : SATURDAY, FEBRUARY 19, 1820.


TO THE EDITOR OF THE PLOUGH BOY.

SIR,

The Montgomery Agricultural Society have announced the following 40 premiums to be awarded to ladies in Oct. 1820. As some of them are novel, their publication in the *Plough Boy,* I am persuaded, will have an excellent effect, as an example. W.

## ON DOMESTIC MANUFACTURES.

| | |
|---|---|
| To the lady who shall produce the best piece of cloth made of merino wool, spun in the family, not less than 15 yards, | $8 |
| 2d best do | 6 |
| For the best piece of cloth made of common wool, spun in the family, not less than 15 yards, | 6 |
| 2d best do | 4 |
| For the best piece of flannel, spun in the family, of merino wool, not less than 20 yds | 6 |
| 2d best | 4 |
| For the best piece of flannel made of common wool, spun in the family, not less than 20 yards, | 5 |
| 2d best do | 4 |
| For the best pair of rose blankets, spun and made in the county, | 5 |
| 2d best do | 4 |
| For the best piece of carpeting, spun in the family | 6 |
| 2d best do | 5 |
| For the best external covering for beds, spun in the county, | 4 |
| 2d best do | 3 |
| For the best hearth rug, spun and made in the family, | 3 |
| 2d best do | 2 |
| For the best pair of worsted stockings, made and knit in the family, | 1 |
| 2d best do | 75 cents |
| For the best pair of woollen stockings, spun and knit in the family, | 1 |
| 2d best do | 75 cents |
| For the best pair of cotton stockings, knit in the family, | 1 |
| 2d best do | 75 cents |
| For the best pair of linnen stockings, spun and knit in the family, | 1 |
| 2d best do | 75 cents |

For the best half pound of sewing linnen thread, spun in the family, 4
2d best do 3
For the best pair half stockings, knit by a girl not over 14 years of age, 1
2d best do 75 cents
For the best 15 runs of linen yarn, spun by a girl not over 14 years of age, 4
2d best do 3
3d best do 2
For the best pair of double mittens, spun and knit by a girl not over 14 years of age, 1
2d best do 75 cents
For the best table linen, not less than 15 yards, 6
2d best do 4
For the best piece of linen, not less than 15 yards, spun in the family, 6
2d best do 4
For the best Ladies' straw or grass bonnet, made in the county, of materials of the growth of the state, 8
2d best do 7
3d best do 6
To the Lady who shall attend the next annual fair in the best homespun dress, 20
2d best do 18
3d best do 16
4th best do 14
5th best do 12
6th best do 10

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We have before us such incontestible evidence of the utility of a HULLING OR SMUT MACHINE, for which letters patent have been granted to BENJAMIN MALTBY, and MALTBY FOWLER, that we feel bound to recommend it to the attention of our Agricultural readers. The evidence above alluded to, consists of a large number of certificates, attesting the efficacy of this machine, several of which are signed by gentlemen well known to the editor, and who have too much pride of character to lend their names to quackery or imposture of any kind. Some of them are men of *Science*, who have examined the machine, and viewed its operation; others are practical millers, and manufacturers, who have tried it, in their respective establishments; and all agree in recommending it as a very valuable improvement. From the mass of evidence in its favour, we select the following certificates; and we cannot conclude this brief notice, without expressing our earnest hope that the extensive use of this machine among the farmers of this state, may be the means of raising the credit of our flour in foreign markets, and adding to the stock of our private and public prosperity.

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The Agricultural Committee of the Society for the promotion of Useful Arts of the State of New-York, are of opinion, that the machine invented by Mr. Benjamin Maltby, for cleansing different kinds of grain, and particularly for separating the smut from the wheat, combines all the advantages requisite for practical agricultural utility, to wit, simplicity, cheapness, and dispatch.

We recommend accordingly, with pleasure, to public patronage, that ingenious machine, and its deserving inventor.

*Albany, March* 23, 1819.

S. DE WITT,
E. C. GENET,
GEORGE CLARK, } *Committee.*

ALBANY, March 22d, 1819.

I have examined Mr. B. Maltby's Hulling and Smut Machine. I have seen the operation of cleansing wheat from smut several times, and considered it attentively. The smut is disengaged by a succession of violent percussions, which are made while the wheat is exposed to a strong current of air, or rather a sheet of wind. The very last particle of smut is entirely driven off, without the troublesome and injurious operation of washing, usually practised. This machine, therefore, appears to be a great acquisition to the agriculturalist.

AMOS EATON, Lecturer on Agriculture, in the Chamber of the Society of Arts.

We, the subscribers, have seen Maltby and Fowler's machine for cleansing and improving grain, and witnessed its effects in cleansing smutty wheat, and are confident that it cleanses the wheat entirely, and must be more valuable than any thing of the kind known.

*Albany, March* 8, 1819.

WILLIAM WOOD, *Millwright*,
WILLIAM ASHBY, *Miller*,
JOHN GODLEY, *Miller*,
LEVI SILLIMAN, *Millwright*.

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POST-OFFICE NOTICE.

The name of the town of *Orange*, in Saratoga county has lately been changed to that of *Halfmoon*; and the name of the Post-office in that town, hitherto called the *Ridersville Post-office*, has been changed, on the books of the General Post-office, to that of *Halfmoon*.

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*Erratum*—In the translation from the Abbe Rozier's Universal Dictionary of Agriculture, given in our 36th number, in the 1st column of page 283, last paragraph, for "Bleeding is requisite" read *Bleeding is forbidden.*

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## Weekly Summary.

**The legislature of Pennsylvania have passed a** law for abolishing imprisonment for debt. By the same law, any fraudlent concealment of property, by a debtor, is punishable as a felony.

**A bill is before the legislature of Massachusetts** for giving mechanics a lien, for the amount of their labours, on all buildings they erect.

**The governor of New-Jersey has recommended** to the legislature of that state, the adoption of more efficient measures for maintaining the jurisdictional rights of that state against the encroachments of this state: alluding to the steamboat controversy we presume.

**It appears that upwards of 6,000,000 pounds** of teas have been imported at the port of Philadelphia, in the course of 3 years past. This must have drawn, in that time, more than 1,000,000 dollars (hard cash) from that port alone. The cash carried off for teas never returns again.

**A writer in the St. Louis Enquirer has, as is** said, demonstrated the practicability, and superior advantages, of carrying on our trade with the East-Indies, by the way of the Missouri and Columbia rivers.

**At Mackinaw, lieut. Curtis has invented and** completed an hydraulic machine, by which, with a trifle of labor, water is raised to the height of 150 feet, and carried 150 yards, into the garrison, so as to afford a plentiful supply.

**One Insurance Company, incorporated last** year, in New-York, has to pay about 50,000 dollars to the sufferers by the fire at Savannah. Upwards of 200,000 dollars worth of the property destroyed is said to have been insured in New-York.

**Two suits, to the amount of 300,000 dollars,** which had been pending for 20 years past were put for ever at rest, during the week before last, by the court of errors affirming the decrees of the chancellor in each. The causes were J. J. Rosevelt ads. the assignees of Mark and Speyer, and J. R. Murray ads. the same. The defendants in error prevailed in each suit.

**Accounts from St. Louis, of the 5th ult. state** that waggons then crossed the Mississippi, opposite that town, on the ice. Also, that our troops, under colonel Leavenworth had got into comfortable winter-quarters at Prairie du Chien, and had ploughed up considerable lands for next summer's cultivation; that the prairies there are of fine quality for culture; grass abundantly sufficient for almost any number of cattle; and that although the place is nearly 45 deg. of N. latitude, still the climate is mild and pleasant; game is abundant; Indians are friendly; mines of copper and iron appear to abound there in plenty.

**The memorable 8th of January, 1815, (the** day of general Jackson's victory) was celebrated with great splendour, on the anniversary of that day, at New-Orleans.

**The Boston Patriot says that a letter was re-** ceived there, on the 1st inst. from a gentleman at Washington, stating that a bill was soon to be introduced in congress for preventing all intercourse with the British possessions in the West-Indies, and those north and east of us.

**A Providence paper says, that the ice under** Weybosset bridge, a place which, from the rapidity of the tide, is but little liable to freezing, has been frozen to a greater thickness, this winter, than has ever been remembered.

**The Lexington Public Advertiser mentions the** extraordinary case of a birth in Woodford county, on the 22d of September last, of two children (Martha Ann and Mary Jane), who are joined together in the middle parts of their bodies; the limbs, upper parts of their bodies, and heads, being separate and distinct; that they are both alive and in health; that they are usually actuated by different feelings, the one being frequently asleep while the other is crying. It appears that the junction in the backs is of a bony substance, in front merely by a fleshy substance, so that it is impossible to separate them without destroying each. They appear to be each endued with the usual capacity and sprightliness of children. A case similar to this is that of the two Hungarian sisters, (Judith and Helen) who were exhibited in England, and elsewhere, about 100 years since, as is mentioned in Ree's Cyclopædia. These sisters were quite accomplished could read, write, and sing very prettily, and spoke the Hungarian, German, French and English languages. They died at the same time, at the age of 22; and it will be fortunate if the exit of these, when it happens, be alike simultaneous.

**A ship arrived this month, at New-Bedford,** Mass. from the coast of Chili, with 2,500 barrels of oil; the greatest cargo ever imported, in one vessel, into this country.

**The family of captain John Sanford, of Bridg-** water society, Conn. about the first inst. narrowly escaped falling victims to the effects of a large dose of arsenic which had been put into the coffee kettle at their breakfast meal.—Fortunately the dose was so large that it could not be retained in the stomachs of those who drank the coffee, so that they have all recovered. A lad, of only 13, who was a clerk to captain S. having been detected in purloining some money out of the store, and who, on being detected manifested much indignation, is supposed to be the author of the criminal attempt, and has been committed accordingly.

FOREIGN.

**Of Mr. Cobbett we have the following farther** particulars since his arrival in England. In one meeting with his friends in Liverpool, speaking of the remains of Thomas Paine, which he had brought with him, he said he found them buried in an obscure place; that the man who had done so much in achieving the independence of this country, had died here neglected; that he had brought his remains to his native land, where he expected his memory would yet be triumphantly honoured; that whilst he (Mr. C) was *Peter Porcupine*, in this country, he had vilified Mr. Paine, and that he was since satisfied he had acted from mistaken motives and information; that in regard to Mr. Paine's religious tenets, he had nothing to do with them; he had never read his books; but he thought it strange that his writings on this subject should be so furiously denounced, though he appears to have honestly believed in one God, and a future state, while those of Hume and Gibbon, who believed in neither, were to be found on the shelves of almost every bookseller in England.

**On the 13th Dec. Mr. C. attended a meeting at** the Crown and Anchor tavern, London, (Mr. Hunt in the chair) for consideriug measures to promote frugality, temperance and sobriety. He there moved a set of resolutions,

which were carried, pledging the meeting to abstain from all exciseable articles, and undertook to prepare a plan for the general instruction of the whole kingdom.

**On the next day, a meeting of the electors of** Westminster was held at the same house, (Sir F. Burdett in the chair) where resolutions were adopted declaring that the house of commons had not the power of committing Mr. Hobhouse. [He had published a pamphlet for which he was imprisoned by that body, the pamphlet being deemed a libel on the house of commons.]

**It further appears, that in the Political Regis-** ter, of Mr. Cobbet, the political character of Sir Francis B. had been pretty roughly handled. On the return of Mr. C. the friends of reform expressed a wish to hear that the difference between them might be amicably adjusted, to which it seems Mr. C. made no objections, and signified his perfect willingness to "go heart and hand" with the baronet in the labours of reform; but declared at the same time, that "unless the baronet would immediately, and out of his own purse, furnish the means of facilitating, as soon as the occasion should offer, the entrance of Mr. Hunt and himself into the house of commons," he would have nothing further to do with him than with any other individual engaged in the same cause. It seems, however, that the baronet had never been informed of this declaration. So stands the matter, as stated by Mr. Cobbett, in his paper.

**Lord John Russel lately moved in the British** Parliament, and had leave given accordingly, to introduce a bill for transferring the right of sending a member to that body from the borough of Grampound to the populous town of Leeds. This is something towards parliamentary reform.

**A bill has been passed in parliament for im-** posing a stamp duty on all small pamphlets; the object of which is stated by the government party to be to prevent the too extensive diffusion of seditious and blasphemous publications.

**A new mode of putting animals to death has** been devised in England, which is said to be done without pain to the beast, and that the meat tastes, cooks, keeps, and salts better. It is done by fixed air. The animal bleeds freely — A number of butchers are said to have adopted this new mode.

*Steam ploughing.*—"Mr. Playfair, (says an English paper) in his curious memoir of J. Watt, Esq. says that the power of steam may be employed in ploughing land, and we believe that there are, at this time, projects in embryo for that purpose."

**The duty on malt, in England, for 4 months,** ending on the 16th Dec. last. was £1,414,610 16 4 sterling.

**Lately died at Chacewater, Eng, Elizabeth** Ralf. aged 21; of the height of 2 feet 10 inches only, and weighing but 20 lbs; well proportioned for her size. Though it was evident she could see and hear, she never was heard to laugh or cry, or to utter any sound whatever.

**It is stated in a late London paper, that, with** the exception of Wirtemburg and Bavaria, all the German sovereigns have carried into effect the resolutions of the Frankfort diet. The press is to be under censorship, and several papers have been discontinued since the measure went into operation. The editor of the *Mentz Journal*, in taking leave of his patrons, observes—the Mentz Journal has renounced the motto of *Fiat Lux*, (Let there be light) which had particular reference to the circumstance that the invention of printing originated in that city.

**Accounts from Naples state that on the 15th** November last, a tremendous tempest was experienced there, to which succeeded a terrific eruption of Mount Vesuvius, which continued to vomit torrents of lava during all the next day.

**From Naples we also learn that Stephen Grel-** let, an American, of the society of friends, but educated in France, was at that city for the purpose of visiting the penitentiaries and prisons, and proposes, after the example of the illustrious Howard, some new ideas and salutary ameliorations in respect to them. He has been received with attention by the emperor of Russia.

**The following is from Madrid, of December 7,** "there are unquestionably affairs of interest pending between this government and England. Couriers are constantly passing from London and back again to this city. The duke San Carlos is now at the head of our diplomacy, and takes an active part."

**A letter from Havanna, of January 6, says that** from the 1st of September to the 31st of December last. 6,474 slaves had been entered at the custom-house there—that during the month last mentioned, there were 143 arrivals, 81 of which were American, and 87 clearances, of which 52 were American—that vessels arrive almost daily, and make great voyages.

**Two vessels lately arrived at Havre and Mar-** seilles, in France, with cargoes of tea, pepper and cloves, from the Brazils, the produce of that country.

## METEOROLOGICAL JOURNAL, FOR THE MONTH OF JANUARY, 1820,

KEPT AT THE CITY ACADEMY IN ALBANY.

| | *Thermom'r* | | | *Barometer.* | | | *Winds.* | | *Weather.* | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| days. | 7, a m | 2, p m | 9, p m | 7, a m | 2, p m | 9, p m | morn'g | aftern. | morn'g | aftern. | *Observations.* |
| 1 | 6 | 19 | 12 | 29.40 | 29 38 | 29 34 | S | S | Clear | Clear | |
| 2 | -3 | 16 | 8 | 29 34 | 29 28 | 29 30 | do | do | do | do | |
| 3 | 16 | 28 | 23 | 29 05 | 29.50 | 29 50 | do | do | do | do | |
| 4 | 22 | 32 | 28 | 29.55 | 29 50 | 29.50 | S E | S E | do | do | |
| 5 | 20 | 30 | 24 | 29.60 | 29.72 | 29.80 | S E | W | Cloudy | Clear | |
| 6 | 19 | 28 | 17 | 29.91 | 29 97 | 29.97 | W | W | Clear | do | |
| 7 | 12 | 28 | 26 | 29.97 | 29.97 | 29 65 | S | S E | Cloudy | Cloudy | |
| 8 | 30 | 35 | 24 | 29.52 | 29.52 | 29.55 | S E | S | do | do | |
| 9 | 9 | 24 | 21 | 29.70 | 29 7 | 29.71 | S E | N | do | do | |
| 10 | 18 | 23 | 18 | 29 71 | 29.71 | 29.50 | N | N | do | do | Snow at night. |
| 11 | 20 | 26 | 20 | 29 30 | 29 30 | 29.30 | N | N | do | do | |
| 12 | 19 | 25 | 15 | 29.37 | 29.42 | 29.55 | N | W | do | do | |
| 13 | 13 | 23 | 13 | 29 70 | 29.75 | 29 70 | W | W | Clear | Clear | |
| 14 | 16 | 23 | 23 | 29.70 | 29.68 | 29.63 | S | S | Cloudy | Cloudy | |
| 15 | 25 | 32 | 26 | 29.60 | 9.70 | 29-77 | NW | W | do | Clear | |
| 16 | 23 | 30 | 22 | 29 95 | 30.02 | 30 02 | NW | W | Clear | do | |
| 17 | 24 | 31 | 25 | 29.50 | 28.90 | 29 02 | E | S E | Cloudy | Cloudy | Snow storm. |
| 18 | 10 | 28 | 16 | 29.43 | 29.56 | 29.56 | W | W | Clear | do | |
| 19 | 6 | 22 | 21 | 29.55 | 29.52 | 29 52 | S W | S W | Cloudy | do | |
| 20 | 4 | 28 | 13 | 29.65 | 29 77 | 29.77 | S W | S W | Clear | Clear | |
| 21 | 0 | 24 | 12 | 29.82 | 29 92 | 29.90 | S W | S | do | do | Snow at night. |
| 22 | 20 | 28 | 23 | 29 75 | 29.67 | 29.67 | S E | S E | Cloudy | Cloudy | |
| 23 | 16 | 29 | 21 | 29.82 | 29.85 | 29.84 | NW | W | do | do | |
| 24 | 14 | 26 | 22 | 29.83 | 29 92 | 29.75 | W | W | Clear | do | |
| 25 | 19 | 24 | 21 | 29.60 | 29.50 | 29.7 | S | S | Cloudy | do | Snow during day. |
| 26 | 11 | 29 | 21 | 29 92 | 29 97 | 29 75 | N | NW | Clear | Clear | Snow at night. |
| 27 | 24 | 32 | 28 | 29.60 | 29 60 | 29.70 | S | S | Cloudy | Cloudy | |
| 28 | 26 | 37 | 26 | 29 70 | 29 66 | 29.72 | S E | S E | do | do | |
| 29 | 26 | 33 | 26 | 29 72 | 29.72 | 9 70 | N | N | do | do | Snow during day. |
| 30 | 26 | 32 | 28 | 29.67 | 29 60 | 9.57 | S E | S | do | do | |
| 31 | 22 | 26 | 12 | 29 50 | 29 50 | 20 63 | W | W | Clear | do | |

**The Bordeaux ship of discovery that was sent** from that place, after an absence of three and a half years, has returned. The ship has traversed the Pacific ocean, and collected, at the Sandwich islands, some interesting accounts of La Perouse, and his companions, which a London paper states will shortly be published.

**Accounts from Calcutta give further particu-** lars of the destruction caused by the earthquake of the 16th June last, in some districts of the country. That called Kutch appears to have suffered most. In this district the city of Rhooj is situated, in which about 7,000 houses were shaken to pieces, and about 1,000 persons had been dug out of the ruins. The earth opened, and torrents of water gushed out. The water courses, which in the summers become dry there, were suddenly filled with water. At other places, flame was seen to issue from the ground, and the whole atmosphere became strongly impregnated with the stench of sulphur.

**One of Kotzebue's plays was lately attempted** to be acted, by some German amateurs, at Constantinople: but a part of the actors being dressed as Musselmen, the Turks considered it an insult offered their religion, and put an end to the play.

**Accounts from Upper Canada represent the** snow having fallen to such depth as to render travelling very difficult; that in the Lower Province the roads were in many places impassable.

*South America.*—A letter to the editor of the Democratic Press, from his correspondent, dated St. Thomas, January 11, gives the following very interesting information: "We have an arrival to-day from Margaritta, which brings us positive accounts that Lima is taken by the independents under general St. Martin; and that Quito has declared itself independent, and has sent deputies to Bolivar, at St. Fee, desiring to be admitted into the Union of Venezuela and New-Granada. Bolivar, after establishing a government at St. Fee, and taking the Spanish general Calsada, who with about 400 men had retreated into Popayan, a prisoner, with his troops, has arrived with the main army, which was considerably reinforced by New-Granadians, in the plains of Venezuela. Bolivar himself made a hasty visit to Angostura, where he remained only 24 hours. During his stay he made general Arismendi (who had acted as vice-president) governor general of Cumana, (to be taken) and doctor Zea was re-appointed vice-president, and is shortly to go to Rome, by way of England, for the purpose of obtaining from the Holy See, bishops, &c. Bermudez has been appointed governor of the province of Socorro. General Anzuategi is dead of the yellow fever.—Mariano Montilla has arrived here from Margaritta, but is to return again immediately, to take charge of the expedition now ready at that island, the destination of which is a secret.—Marino was with about 5,000 men at Maturin, and there fell sick, which has caused a delay of his march, and it is feared will be very detrimental to the final movements of the independents in Venezuela. The provinces of Venezuela and New-Granada, have taken the name of THE REPUBLIC OF COLUMBIA. If possible, I shall send you a copy of the decree, dated 17th December, 1819, at Angostura. The next opportunity, I shall write you again. I look on the republic of Columbia as firmly established. In a few months we shall see Morillo's power at an end.———P. S. I this moment learn that Dr. Zea is not to proceed to Europe, but to the United States, as ambassador extraordinary."

**All the late accounts from South America agree** in announcing such advantages as would seem almost decisive of the fate of the contest in that hemisphere.

**A letter from an officer of the U. S. frigate** Macedonian, dated at Valparaiso, Oct. 14, says "Lord Cochrane has become a freebooter, and will probably capture every thing he can get hold of; property is by no means safe, and it is hoped the American government will direct an additional force to this quarter."

### PRESENT PRICES OF COUNTRY PRODUCE IN THIS MARKET.

FLOUR AND GRAIN.—Superfine flour $6—Rye flour $2 75 per bbl.—Indian meal $1 50 cwt.—Buckwheat flour $1 25 to $1 75 cwt.—Wheat 87 cents to $1 6 bush.—Rye 54—Corn 44—Oats 31—Flax-seed $1 50—Barley 75—Peas 50 to 62 1-2 per bush.

Beef, stall fed $6 cwt.—common beef $3 to $4 50—Pork $4 to 5, Mutton 3 to 4 cents per lb.

Hay, average, 37 1-2 cents per cwt.

Butter 10 to 12 cents per lb.—Cheese, good, $6 per cwt.——Cider $2 per bbl.—Potatoes 30 cents per bushel.—Common Turnips, 25 cents.

LUMBER.—Pine plank 14 cents—white p. do. 18—do. boards, good, $2 100 ft. com. $1 do.—Shingles, good, $1 50 per bundle.

*Albany, Feb.* 18, 1820.

# PRICE CURRENT.

*Corrected Weekly, from the New-York General Price Current and Public Sales Report.*

| | Per | From D. | From C. | To D. | To C. | Remarks |
|---|---|---|---|---|---|---|
| ASHES, Pot | Ton | 112 | | | | Dull. |
| —— Pearl | | 117 | | | | " |
| BEEF, Mess | bbl | 8 | 37 | 10 | | |
| —— Prime | | 8 | 50 | | | |
| —— Cargo | | 6 | 25 | | | |
| BUTTER, first quality | lb | | 15 | | 16 | |
| —— for exportation | | | 9 | | 11 | |
| CANDLES, mould | | | 18 | | 19 | |
| —— Dipped | | | 17 | | | |
| —— Sperm | | | 44 | | 45 | |
| —— Wax | | | 60 | | | |
| CHEESE, American | | | 6 | | 7 | |
| CHOCOLATE, New-York | | | 17 | | 24 | |
| —— Boston, No. 1 | | | 17 | | 24 | |
| —— Albany | | | 20 | | 25 | |
| DOMESTIC GOODS, | | | | | | |
| —— White shirting | yard | | 14 | | 18 | |
| —— Brown do | | | 12 | | 13 | |
| —— 3-4 checks | | | 16 | | 18 | |
| —— 7-8 do | | | 20 | | 22 | |
| —— 4-4 do | | | 24 | | 27 | |
| —— Stripes | | | 16 | | 18 | |
| —— Plaids | | | 16 | | 20 | |
| —— Bed-ticks | | | 28 | | 36 | |
| —— Chambrays | | | 14 | | 15 | |
| FEATHERS | lb | | 55 | | 62 | |
| FISH, Dry Cod | cwt | 2 | 50 | 2 | 87 | |
| —— —— scale | | 2 | | | | |
| —— Pickled Cod | bbl | 3 | 50 | 4 | | |
| —— —— scale | | 2 | | | | |
| —— Salmon | | 15 | | | | |
| —— Fall mackrel No. 1 | | 8 | | 8 | 75 | |
| —— —— No. 2 | | 5 | 50 | 6 | | |
| —— —— No. 3 | | 4 | 50 | 5 | | |
| —— Southern shad No. 1 | | 5 | 50 | 7 | | |
| —— Connecticut mess shad | | 10 | 50 | 11 | | |
| —— Herrings | | 2 | 50 | 3 | | |
| FLAX | lb | | 16 | | 18 | |
| FLAX-SEED, clean | cask | 13 | | 13 | 50 | |
| —— rough | | 12 | | 13 | | |
| FLOUR & GRAIN | | | | | | |
| —— New-York superfine | lb. | 5 | 87 | 6 | | |
| —— Philadelphia | | 6 | 50 | 6 | 75 | |
| —— Baltimore | | 6 | 50 | | | |
| —— Richmond | | 6 | | 6 | 25 | |
| —— Middlings, fine | | 4 | | 4 | 25 | |
| —— Rye flour | | 3 | 75 | 3 | 87 | |
| —— Indian meal | | 4 | | | | |
| —— —— in hogsheads | 800 | 18 | | 19 | | |
| —— Wheat, North River | bus. | | 87 | 1 | | |
| —— —— Southern, new | | 1 | 10 | 1 | 12 | |
| —— Barley | | | 65 | | 68 | |
| —— Oats | | | 40 | | 49 | |
| GLASS, Amer. 7 by 9 | box | 9 | | | | |
| —— - 8 10 | | 10 | | | | |
| —— - 10 12 | | 12 | | 12 | 50 | |
| GLUE | lb | | 12 | | 13 | |
| GUN-POWDER, Amer. | 25lb | 5 | | 6 | | |
| —— - Cannon | | 6 | | 6 | 50 | |
| HAMS, Virginia | lb | | 10 | | 12 | |
| —— North River | | | 9 | | 11 | |
| HEMP, Water rot | Ton | | | | | None. |
| —— Dew rot | | 150 | | | | Scarce. |
| HOGSLARD | lb | | 11 | | 12 | |
| HONEY | | | 15 | | 16 | |
| HOPS 1st and 2d sort | | | 6 | | 8 | |
| IRON, American | Ton | 85 | | 90 | | |
| LUMBER, Boards, oak | Mft | 13 | | | | |
| —— North River pine | | 16 | | 17 | | |
| —— Yellow pine | | 13 | | 20 | | |
| —— Albany pineb'ds | pie. | | 18 | | | |
| —— Scantling, pine | Mft | 14 | | | | |
| —— —— oak | | 25 | | | | |
| —— Oak timber | sd.ft | | 20 | | 25 | |
| —— Shingles, cypress | 1000 | 4 | | | | |
| —— —— pine | | 3 | | 3 | 50 | |
| —— Staves, pipe | | 60 | | | | |
| —— —— hhd | | 46 | | | | |
| —— —— bbl | | 28 | | | | |
| —— —— R O hhd | | 28 | | | | |
| —— Hhd heading | | 54 | | | | |
| —— —— hoops | | 25 | | 30 | | |
| OIL, Linseed | gal | 1 | | | | |
| PLAISTER of PARIS | Ton | 4 | 50 | | | |
| PORK, Cargo | bbl | 10 | 50 | | | |
| —— Prime | | 12 | 62 | | | |
| —— Mess | | 14 | 75 | 15 | 25 | |
| SOAP White | lb | | 13 | | 15 | |
| —— Brown | | | 9 | | 11 | |
| WAX, Bees, white | | | 55 | | 60 | |
| —— —— yellow | | | 31 | | 32 | |

*New-York, February* 11, 1820.

# POETRY.

FOR THE PLOUGH BOY.

## TO PART.

BY WILLIAM RAY.

What a heart-piercing verb is this—
The murd'rer of all earthly bliss—
O Death 'tis own'd thy keenest dart—
A fest'ring thorn to man's repose—
The sharpest sting of human woes,
Is Heaven's decree that *friends must* PART.

Think on the death-bed—on the shroud—
The wailing friends—the sober crowd—
The mournful coffin—groaning cart—
That must so shortly bear away
This feeble tenement of clay—
That must the soul and body *part!*

In life's endearing tender ties,
We look with fond adoring eyes,
On all that's precious to the heart,
The partner of our wedded joys,
And babes—with such bewitching toys,
How can a parent ever *part!*

Whene'er they cluster round my knee,
In angel innocence, I see
The charms of nature, not of art;
Oft as I clasp them to my soul,
In spite of *man* the tears *will* roll,
To think—O must we ever *part!*

And when around the board we meet
Long absent friends, in converse sweet,
We feel a secret thrilling smart,
That soon will come that painful hour,
(For Time the space will quick devour,)
The sad adieu, when we must *part!*

Xerxes, that great victorious chief,
Wept with unconquerable grief,
(Ambition gave *his* tears the start)
To think his countless legions must,
In one short century fall to dust,
And he with all his honors *part!*

But holier sympathies unite
Congenial souls in pure delight,
Who steer by love's heaven-guiding chart;
And though afflictions tempests rise,
Their winds shall waft us to the skies,
*Where friend with friend shall never* PART!

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The Ohio Inquisitor has an account of a shocking murder that lately took place in Indiana. A respectable young man was about to be married to a young lady of that place; but on the day previous to that intended for celebrating the nuptials he was accosted by his murderer, and told that the lady was engaged to him, and that if he, the intended bridegroom, would not either fight him, or sign a paper he held in his hand, he would instantly blow him through. The other refusing to do either, the threat was instantly put into execution. The murderer has been secured; but, for some particular reasons, neither his name, nor that of his victim, is mentioned.

A later account states the murder above mentioned to have been at Lawrenceburg—the name of the murderer Jones—that of the murdered, Palmer Warner, lately of Ontario county, in this state.

A letter from the Count de Survillier, (Joseph Bonaparte) to William Snow Esq. of Bordentown, written shortly after the elegant seat of the former gentleman, immediately above that village, was consumed by fire, speaks in very high terms of the kind assistance and honesty manifested by the citizens of Bordentown on that occasion. After they had made every unavailing effort to extinguish the flames, they proceeded to carry out of the building, all the most valuable property, and which was of great amount. He says that although the articles were in the hands of many, and much gold coin among the rest, yet every thing was duly returned. He concludes his letter by saying, "I cannot omit on this occasion to repeat what I have so often said, that the Americans are, without contradiction, the most happy people I have known; still more happy if they understand well their happiness." He is said to be much esteemed by the citizens of Bordentown.

On the 27th ult. a pile of buildings was consumed, in Boston; and amongst others, that in which the printing-office of the Boston Yankee was kept; the books and establishment of which were mostly consumed.

A whale, 70 feet in length, was lately taken in the harbor of Provincetown, Maine.

# Sale of Land for Taxes.

*State of New-York—Comptroller's Office.*

PUBLIC Notice is hereby given, that lists of certain lands liable to be sold for taxes, have been forwarded to the several counties in this state, in order to be deposited in the several county treasurers' and town clerks' offices, respectively, for the information of all persons concerned; and that the said lists may be examined at either of the said offices, at all reasonable hours: And notice is hereby also given, that on *Thursday, the seventh day of October next*, at ten o'clock in the forenoon, at the capitol, in the city of Albany, and on the next succeeding days, I will sell at public auction, to the highest bidder, so much of each lot, piece or parcel of land mentioned and described in the said lists, as will be necessary to pay all taxes, interest and charges now due, or that may grow and may be due thereon at the time of sale.

The conditions of sale will be, that the purchasers within forty-eight hours after the sale, pay the purchase moneys and receive certificates of their purchases; and that after the expiration of two years from the date of their certificates, they receive conveyances for the lands purchased by them respectively, unless the owners, or those claiming to be such, of the lands so purchased, shall, previous to the expiration of the said two years, pay to the comptroller, for the use of the said purchasers, their heirs and assigns, the amount of the purchase moneys, with interest, at the rate of twenty per centum per annum.—The lands sold to be subject to all claims of the state thereon. And in case any land to be purchased at the said sale and that may be conveyed in pursuance thereof, shall at the time of conveyance be in the actual possession and occupancy of any person or persons, the title of the purchaser shall then and in that case be subject to the stipulations and provisions of the fifth section of the act, entitled "an act to repeal in part the act, entitled "an act providing more effectually to ascertain and determine the true value of real estates within this state, and for other purposes," and further to amend the act for the assessment and collection of taxes" passed April 13, 1819.

ARCH'D. M'INTYRE, Comptroller.

Albany, May 27th, 1819.

☞ Persons who may have made payments into the treasury for taxes, and omitted to have their receipts presented at the comptroller's office to have them entered and countersigned as required by law, are advised to present them in order to be so entered and countersigned before the day of sale; or that in case of failing to do so, their lands will be sold, and they thereafter be deprived of the benefit of all such payments.

Payments for taxes cannot be received on the days of sale, nor for two days prior to the sale.

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☞ The above mentioned sale is postponed untill Tuesday, the eighth day of February next, at ten o'clock in the forenoon.

ARCH'D M'INTYRE, *Comptroller.*

Albany, October 2, 1819.

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☞ Agreeably to an act of the legislature, passed this day, the above sale is further postponed until the first Tuesday of February, in the year 1821, to be then held at the same place and hour. ARCHD. M'INTYRE, *Comptr.*

*Albany, February* 4, 1820.

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BY JOHN O. COLE.

☞ COMMUNICATIONS, SUBSCRIPTIONS, and ADVERTISEMENTS, for this paper, and PRINTING JOBS, of every description, which will be neatly executed, at fair prices, received at the Post Office. All letters from abroad, directed to the Postmaster, Albany, will be duly attended to.

TERMS.

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